

### High-Performance VPN

- Protocols
  - IPSec
  - PPTP
  - L2TP
  - SSL
- VPN Tunnels
  - Up to 25 (DSR-250/250N)
  - Up to 35 (DSR-500/500N)
  - Up to 70 (DSR-1000/1000N)
- SSL VPN tunnels
  - Up to 5 (DSR-250/250N)
  - Up to 10 (DSR-500/500N)
  - Up to 20 (DSR-1000/1000N)
- DES, 3DES, AES Encryption
- Main/Aggressive Negotiation

### Wireless Access and Security<sup>1</sup>

- IEEE 802.11 a<sup>2</sup>/b/g/n (2.4 GHz, 5 GHz<sup>2</sup>)
- IEEE 802.1x RADIUS Authentication with EAP-TLS, EAP-TLLS, EAP-PEAP
- WPS, WEP, WPA-PSK, WPA-EAP, WPA2-PSK, WPA2-EAP

### Enhanced Network Services

- IPv6
- DHCP Server/ Relay
- Dynamic DNS
- IEEE 802.1q VLAN
- Multiple SSIDs
- SSID-to-VLAN Mapping

### Content Filtering

- Static URL Address Filtering
- Keyword Filtering

### Fault Tolerance<sup>3</sup>

- WAN Traffic Failover
- Outbound Load Balancing

<sup>1</sup> DSR-250N/500N, and DSR-1000N only

<sup>2</sup> DSR-1000N only

<sup>3</sup> DSR-500/500N/1000, and 1000N only

## Unified Services Routers



D-Link Unified Services Routers provide secure, high performance networking solutions to address the growing needs of small and medium businesses. The integrated high-speed IEEE 802.11n wireless technology in the DSR-250N, DSR-500N, and the DSR-1000N routers offers comparable performance to traditional wired networks, but with fewer limitations. Each router provides optimal network security via features such as Virtual Private Network (VPN) tunnels, IP Security (IPSec), Point-to-Point Tunneling Protocol (PPTP), Layer 2 Tunneling Protocol (L2TP), and Secure Sockets Layer (SSL). These routers also allow you to empower your road warriors with clientless remote access anywhere and anytime using SSL VPN tunnels.

### Comprehensive Management Capabilities

The DSR-500/500N and DSR-1000/1000N include dual-WAN Gigabit Ethernet that provides policy-based service management to ensure maximum productivity for your business operations. The failover feature maintains data traffic without disconnecting when a landline connection is lost. The Outbound Load Balancing feature adjusts outgoing traffic across two WAN interfaces and optimizes system performance, resulting in high availability. The second WAN port can be configured as a DMZ port, allowing you to isolate servers from your LAN.

### Superior Wireless Performance

Designed to deliver superior wireless performance, the DSR-250N, DSR-500N, and DSR-1000N include 802.11a<sup>2</sup>/b/g/n, allowing for operation on either the 2.4 GHz or 5 GHz<sup>2</sup> wireless LAN radio bands. Multiple In Multiple Out (MIMO) technology allows the DSR-250N, DSR-500N and DSR-1000N to provide high data rates and a wide wireless coverage area with minimized "dead spots."

### Robust VPN Features

A fully featured virtual private network (VPN) provides your mobile workers and branch offices with a secure link to your network. The DSR-250/250N, DSR-500/500N, and DSR-1000/1000N are capable of simultaneously managing 5, 10, or 20 Secure Sockets Layer (SSL) VPN tunnels respectively, empowering your mobile users by providing remote access to a central corporate database. Site-to-site VPN tunnels use IP Security (IPSec) Protocol, Point-to-Point Tunneling Protocol (PPTP), or Layer 2 Tunneling Protocol (L2TP) to facilitate branch office connectivity through encrypted virtual links. The DSR-250/250N supports up to 25 simultaneous VPN tunnels, the DSR-500/500N supports up to 35 VPN tunnels, and the DSR-1000/1000N supports up to 70 VPN tunnels.

### Efficient Green Technology

As a concerned member of the global community, D-Link is devoted to providing eco-friendly products. D-Link Green Wi-Fi and D-Link Green Ethernet features save power and help cut energy usage costs. The D-Link Green WLAN Scheduler shuts down your wireless network automatically according to a schedule you define, allowing you to turn off your wireless network during off-peak hours, saving energy and keeping your network secure. The D-Link Green Ethernet feature can detect the length of the cables connected to the router, and can adjust power usage accordingly to save energy automatically without sacrificing performance. It can also detect if a link is down on a port, and automatically puts that port into a sleep mode that drastically reduces the amount of power used. In addition, compliance with RoHS (Restriction of Hazardous Substances) and WEEE (Waste Electrical and Electronic Equipment) directives make D-Link Green certified devices an environmentally responsible choice.



## DSR-250

- 8 Gigabit LAN Ports
- Gigabit WAN Port
- USB 2.0 Port

## DSR-500

- 4 Gigabit Ethernet LAN Ports
- 2 Gigabit Ethernet WAN Ports
- USB 2.0 Port

## DSR-1000

- 4 Gigabit Ethernet LAN Ports
- 2 Gigabit Ethernet WAN Ports
- 2 USB 2.0 Ports

## DSR-250N

- IEEE 802.11b/g/n wireless LAN (2.4 GHz)
- 8 Gigabit LAN Ports
- Gigabit WAN Port
- USB 2.0 Port

## DSR-500N

- IEEE 802.11b/g/n wireless LAN (2.4 GHz)
- 4 Gigabit Ethernet LAN Ports
- 2 Gigabit Ethernet WAN Ports
- USB 2.0 Port

## DSR-1000N

- IEEE 802.11a/b/g/n wireless LAN (2.4 GHz/5 GHz)
- 4 Gigabit Ethernet LAN Ports
- 2 Gigabit Ethernet WAN Ports
- 2 USB 2.0 Ports

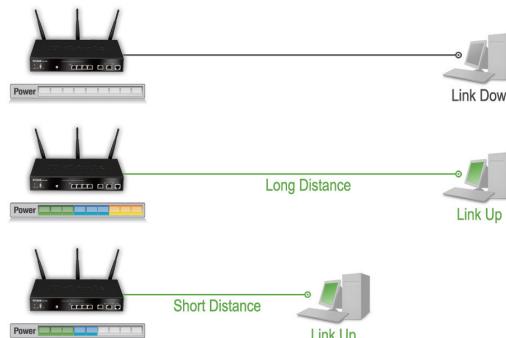


## Green Wi-Fi<sup>4</sup>



The WLAN Scheduler shuts down the WLAN during off-peak hours to enhance network security and save power.

## Green Ethernet



D-Link Green Ethernet detects link status and cable length and adjusts power usage accordingly.

## USB 2.0 Extension

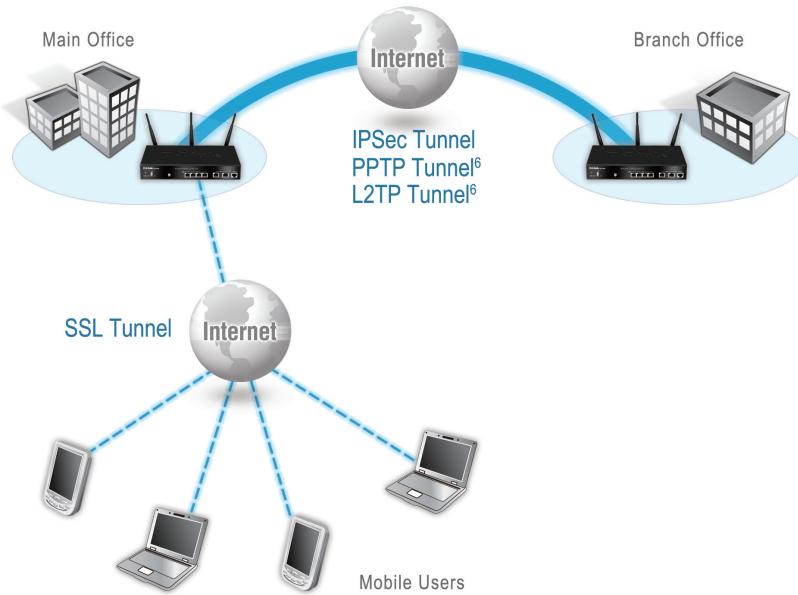


Supports one (DSR-250/250N/500/500N) or two (DSR-1000/1000N) USB 2.0 devices to extend functionality via D-Link's SharePort feature.

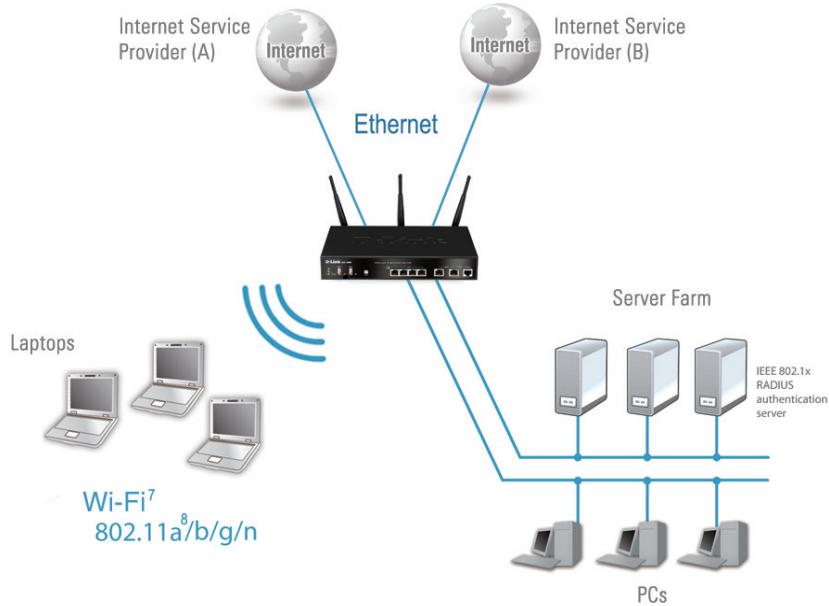
<sup>4</sup> DSR-250N/500N, and DSR-1000N only

<sup>5</sup> Printer support list can be referred to at <http://www.openprinting.org/printers>

### Secure VPN Network Implementation



### Dual WAN for Redundant Internet



<sup>6</sup> Available with future firmware upgrade  
<sup>7</sup> DSR-500N and DSR-1000N only  
<sup>8</sup> DSR-1000N only

### Technical Specifications

**DSR-250N**



**DSR-500N**



**DSR-1000N**



Interface	Ethernet	10/100/1000 Mbps WAN Port 8 10/100/1000 Mbps LAN Ports	2 10/100/1000 Mbps WAN Ports 4 10/100/1000 Mbps LAN Ports	2 10/100/1000 Mbps WAN Ports 4 10/100/1000 Mbps LAN Ports
	Wireless	802.11b/g/n (Single Band) 2 Detachable 2dBi Omni-Directional Antennas	802.11b/g/n (Single Band) 3 Detachable 2dBi Omni-Directional Antennas	802.11a/b/g/n (Dual Band) 3 Detachable 2dBi Omni-Directional Antennas
	USB 2.0 Ports	1	1	2
	Console	1 RJ-45	1 RJ-45	1 RJ-45
System Performance <sup>10</sup>	Firewall Throughput <sup>9</sup>	45 Mbps	70 Mbps	130 Mbps
	VPN Throughput <sup>11</sup>	35 Mbps	70 Mbps	100 Mbps
	Concurrent Sessions	20,000	30,000	60,000
	New Sessions (per second)	200	300	600
	Firewall Policies	200	300	600
Internet Connection Type	Static/ Dynamic IP	✓	✓	✓
	PPPoE/ L2TP/ PPTP	✓	✓	✓
	Multiple PPPoE	✓	✓	✓
Firewall System	Static Route	✓	✓	✓
	Dynamic Route	—	RIPv1, RIP v2, OSPF <sup>12</sup>	
	Dynamic DNS	✓	✓	✓
	Inter-VLAN Route	✓	✓	✓
	NAT, PAT	✓	✓	✓
	Web Content Filtering	Static URL, Keywords		
	Intrusion Prevention System (IPS)	Signature package included in Firmware		
Networking	DHCP Server/ Client	✓	✓	✓
	DHCP Relay	✓	✓	✓
	IEEE802.1q VLAN	✓	✓	✓
	VLAN (Port-Based)	✓	✓	✓
	IP Multicast	IGMP Proxy		
	IPv6	✓	✓	✓
	Route Failover	—	✓	✓
	Outbound Load Balancing	—	✓	✓

### Technical Specifications

#### DSR-250

#### DSR-500

#### DSR-1000



Interface	Ethernet	10/100/1000 Mbps WAN Ports 8 10/100/1000 Mbps LAN Ports	2 10/100/1000 Mbps WAN Ports 4 10/100/1000 Mbps LAN Ports	2 10/100/1000 Mbps WAN Ports 4 10/100/1000 Mbps LAN Ports
System Performance <sup>10</sup>	Firewall Throughput <sup>9</sup>	45 Mbps	70 Mbps	130 Mbps
Internet Connection Type	Static/ Dynamic IP	✓	✓	✓
Internet Connection Type	PPPoE/ L2TP/ PPTP	✓	✓	✓
Internet Connection Type	Multiple PPPoE	✓	✓	✓
Firewall System	Static Route	✓	✓	✓
Firewall System	Dynamic Route	—	RIPv1, RIPv2, OSPF <sup>12</sup>	RIPv1, RIPv2, OSPF <sup>12</sup>
Firewall System	Dynamic DNS	✓	✓	✓
Firewall System	Inter-VLAN Route	✓	✓	✓
Firewall System	NAT, PAT	✓	✓	✓
Firewall System	Web Content Filtering	Static URL, Keywords		
Firewall System	Intrusion Prevention System (IPS)	Signature package included in Firmware		
Networking	DHCP Server/ Client	✓	✓	✓
Networking	DHCP Relay	✓	✓	✓
Networking	IEEE802.1q VLAN	✓	✓	✓
Networking	VLAN (Port-Based)	✓	✓	✓
Networking	IP Multicast	IGMP Proxy		
Networking	IPv6	✓	✓	✓
Networking	Route Failover	—	✓	✓
Networking	Outbound Load Balancing	—	✓	✓

## Technical Specifications

### DSR-250N



### DSR-500N



### DSR-1000N



		DSR-250N	DSR-500N	DSR-1000N
Wireless	Multiple Service Set Identifier (SSID)	✓	✓	✓
	Service Set Identifier (SSID) to VLAN Mapping	✓	✓	✓
	Wireless Security	Wired Equivalent Privacy (WEP) Wi-Fi Protect Setup (WPS) Wi-Fi Protected Access – Personal (WPA-PSK) Wi-Fi Protected Access – Enterprise (WPA-EAP) Wi-Fi Protected Access version 2 – Personal (WPA-PSK) Wi-Fi Protected Access version 2 – Enterprise (WPA-EAP)	Wired Equivalent Privacy (WEP) Wi-Fi Protect Setup (WPS) Wi-Fi Protected Access – Personal (WPA-PSK) Wi-Fi Protected Access – Enterprise (WPA-EAP) Wi-Fi Protected Access version 2 – Personal (WPA-PSK) Wi-Fi Protected Access version 2 – Enterprise (WPA-EAP)	Wired Equivalent Privacy (WEP) Wi-Fi Protect Setup (WPS) Wi-Fi Protected Access – Personal (WPA-PSK) Wi-Fi Protected Access – Enterprise (WPA-EAP) Wi-Fi Protected Access version 2 – Personal (WPA-PSK) Wi-Fi Protected Access version 2 – Enterprise (WPA-EAP)
Wi-Fi	Certification			
Virtual Private Network (VPN)	VPN Tunnels	25	35	70
	Encryption Methods	DES, 3DES, AES, Twofish, Blowfish, CAST-128, NULL		
	IPSec/PPTP/L2TP Server	✓	✓	✓
	PPTP/L2TP Clients	25/25	25/25	25/25
	IPSec NAT Traversal	✓	✓	✓
	Dead Peer Detection	✓	✓	✓
	IP Encapsulating Security Payload (ESP)	✓	✓	✓
	IP Authentication Header (AH)	✓	✓	✓
	VPN Tunnel Keep Alive	✓	✓	✓
	Hub and Spoke	✓	✓	✓
SSL Virtual Private Network (SSL VPN)	SSL VPN Tunnel	5	10	20
	SSL Encryption Methods	DES, 3DES, AES		
	SSL Message Integrity	MD5, SHA1		
Bandwidth Management	Max. Bandwidth Control	✓	✓	✓
	Priority Bandwidth Control	Port-Based QoS 3 Classes		

### Technical Specifications

#### DSR-250

#### DSR-500

#### DSR-1000



Wireless	<b>Multiple Service Set Identifier (SSID)</b>	—	—	—
	<b>Service Set Identifier (SSID) to VLAN Mapping</b>	—	—	—
	<b>Wireless Security</b>	—	—	—
Wi-Fi	<b>Certification</b>	—	—	—
Virtual Private Network (VPN)	<b>VPN Tunnels</b>	25	35	70
	<b>Encryption Methods</b>	DES, 3DES, AES, Twofish, Blowfish, CAST-128, NULL		
	<b>IPSec/PPTP/L2TP Server</b>	✓	✓	✓
	<b>PPTP/L2TP Clients</b>	25/25	25/25	25/25
	<b>IPSec NAT Traversal</b>	✓	✓	✓
	<b>Dead Peer Detection</b>	✓	✓	✓
	<b>IP Encapsulating Security Payload (ESP)</b>	✓	✓	✓
	<b>IP Authentication Header (AH)</b>	✓	✓	✓
	<b>VPN Tunnel Keep Alive</b>	✓	✓	✓
SSL Virtual Private Network (SSL VPN)	<b>SSL VPN Tunnel</b>	5	10	20
	<b>SSL Encryption Methods</b>	DES, 3DES, AES		
	<b>SSL Message Integrity</b>	MD5, SHA1		
Bandwidth Management	<b>Max. Bandwidth Control</b>	✓	✓	✓
	<b>Priority Bandwidth Control</b>	Port-Based QoS 3 Classes		

### Technical Specifications

#### DSR-250N



#### DSR-500N



#### DSR-1000N



System Management	Web-based User Interface	HTTP, HTTPS				
	Command Line	✓	✓	✓		
	SNMP	v1, v2c, v3				
Physical & Environment	Power Supply	External Power Supply Unit DC 12 V / 1.5 A	Internal Power Supply Unit DC 12 V / 2.5 A			
	Max. Power Consumption	12.6 W	16.8 W	19.3 W		
	Dimensions (L x W x H)	140 x 203 x 35 mm (5.51 x 8.0 x 1.38 inches)	180 x 280 x 44 mm (7.09 x 11.02 x 1.73 inches)			
	Operation Temperature	0 to 40 °C				
	Storage Temperature	-20 to 70 °C				
	Operation Humidity	5% to 95% non-condensing				
	EMI/EMC	FCC Class B, CE Class B, C-Tick	FCC Class B, CE Class B, C-Tick, IC	FCC Class B, CE Class B, VCCI, C-Tick, IC		
	Safety	cUL, LVD (EN60950-1)				
MTBF	250,000 hours	260,000 hours				

## Technical Specifications

### DSR-250

### DSR-500

### DSR-1000



System Management	<b>Web-based User Interface</b>	HTTP, HTTPS				
	<b>Command Line</b>	✓	✓	✓		
	<b>SNMP</b>	v1, v2c, v3				
Physical & Environment	<b>Power Supply</b>	External Power Supply Unit DC 12 V / 1.5 A	Internal Power Supply Unit DC 12 V / 2.5 A	Internal Power Supply Unit DC 12 V / 2.5 A		
	<b>Max. Power Consumption</b>	11.8 W	15.6 W	17.2 W		
	<b>Dimensions (L x W x H)</b>	140 x 203 x 35 mm (5.51 x 8.0 x 1.38 inches)	180 x 280 x 44 mm (7.09 x 11.02 x 1.73 inches)			
	<b>Operation Temperature</b>	0 to 40 °C (32 to 104 °F)				
	<b>Storage Temperature</b>	-20 to 70 °C (-4 to 158 °F)				
	<b>Operation Humidity</b>	5% to 95% non-condensing				
	<b>EMI/EMC</b>	FCC Class B, CE Class B, C-Tick				
	<b>Safety</b>	cUL, LVD(EN60950-1)				
	<b>MTBF</b>	250,000 hours	260,000 hours	260,000 hours		

<sup>9</sup> VPN throughput is measured using UDP traffic with a 1420 byte packet size, adhering to RFC2544.

<sup>10</sup>The maximum Firewall plaintext throughput is based on RFC2544 testing methodologies.

<sup>11</sup>Actual performance may vary depending on network conditions and activated services.

<sup>12</sup>Available with future firmware upgrade.



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